

INTERNATIONAL SEARCH REPORT

Int. Patent Application No.
PCT/GB 03/05503

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C08K3/00 C08K3/04 C08K3/34 C08L83/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08K C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 197 869 B1 (HECKMANN WALTER ET AL) 6 March 2001 (2001-03-06) Table 1 No. 3 claims 1-4,8	1,2, 4-12,19
Y	---	3
X	WO 01/88029 A (HOCH MARTIN ; JABS GERT (DE); BAYER AG (DE); MAUERER OTTO (DE)) 22 November 2001 (2001-11-22) examples 3C,3H; table 3 claims 1,11-13	1,2, 4-12,19
Y	---	3
Y	US 6 492 453 B1 (JOZOKOS MARK A ET AL) 10 December 2002 (2002-12-10) claims 1,5,7-11	3

	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

29 April 2004

Date of mailing of the international search report

1. 05. 04

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Russell, G

INTERNATIONAL SEARCH REPORT

Int. Application No.
PCT/GB 03/05503

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 207 085 B1 (ACKERMAN EVA) 27 March 2001 (2001-03-27) claims 1,3,5,7-12,15-20 ---	1,2, 4-13,16, 18,21
X	US 6 031 040 A (HORACEK HEINRICH) 29 February 2000 (2000-02-29) column 2, line 2 - line 17 claims ---	1,2, 4-12,19
A	US 5 508 321 A (BREBNER KEITH I) 16 April 1996 (1996-04-16) claims ---	1,13,14, 17,19, 21-29
A	EP 0 519 863 A (HILTI AG) 23 December 1992 (1992-12-23) claims 1,2,5 ---	1,13,14, 17,19, 21,22, 24-29
A	US 4 694 030 A (EBNETH HAROLD ET AL) 15 September 1987 (1987-09-15) column 2, line 64 -column 3, line 2 ---	20,24-29
A	US 5 262 454 A (LEROUX ROLAND ET AL) 16 November 1993 (1993-11-16) example ---	20,24-29
X	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 11, 30 September 1999 (1999-09-30) -& JP 11 158354 A (TOSHIBA CHEM CORP), 15 June 1999 (1999-06-15) abstract ---	20,24-26
X	EP 0 995 778 A (BASF CORP) 26 April 2000 (2000-04-26) paragraph '0030! claims 1-7 ---	20,24-26
X	US 5 760 155 A (MOWRER NORMAN R ET AL) 2 June 1998 (1998-06-02) column 14, line 10 - line 19 claim 1 ---	20,24-26
X	US 4 624 998 A (KEIL JOSEPH W) 25 November 1986 (1986-11-25) examples 8,9 claims 1,2,8-12 ---	20,24-26

INTERNATIONAL SEARCH REPORT

national application No.
PCT/GB 03/05503

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
1-22, 24-29
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-19, 21-22

Composition comprising (a) particulate material which expands on application of heat, and (b) particulate nano-filler together with at least one polymer and/or curable monomer or oligomer; cured article therefrom and process for manufacture of said cured article; method of making adhesive bond with said composition; particulate composition comprising (a) and (b); composition comprising (a) and (b), optionally flame retardant additives with reactive monomers, oligomers, polymers given by a. to i.

2. Claims: 23, 29

A fire resistant material comprises a polymer blend of at least one silicone polymer; and its use as a fire-retardant.

3. Claims: 20, 24-29

A curable composition containing one or more reactive monomers, oligomers and polymers comprising a polyorganosiloxane containing one or more selected functional groups, and a second component whose reactive species is selected from a. to c.; and its use as a fire-retardant.

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/GB 03/05503

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6197869	B1	06-03-2001	DE 19621732 A1	04-12-1997
			DE 59704249 D1	13-09-2001
			WO 9745486 A1	04-12-1997
			EP 0902811 A1	24-03-1999
			ES 2161467 T3	01-12-2001
			JP 2000510899 T	22-08-2000
WO 0188029	A	22-11-2001	DE 10024421 A1	22-11-2001
			AU 7239501 A	26-11-2001
			CA 2409019 A1	15-11-2002
			WO 0188029 A1	22-11-2001
			EP 1287066 A1	05-03-2003
			JP 2003533575 T	11-11-2003
			US 2003125447 A1	03-07-2003
US 6492453	B1	10-12-2002	DE 10124755 A1	11-04-2002
			GB 2367064 A	27-03-2002
			US 2003125439 A1	03-07-2003
US 6207085	B1	27-03-2001	NONE	
US 6031040	A	29-02-2000	AT 405410 B	25-08-1999
			AT 85797 A	15-12-1998
			AT 204897 T	15-09-2001
			DE 59801282 D1	04-10-2001
			EP 0879870 A1	25-11-1998
US 5508321	A	16-04-1996	CA 2159165 A1	06-04-1996
EP 0519863	A	23-12-1992	DE 4120561 A1	24-12-1992
			AU 649843 B2	02-06-1994
			AU 1840792 A	24-12-1992
			CA 2075723 A1	22-12-1992
			EP 0519863 A1	23-12-1992
			FI 922702 A	22-12-1992
			JP 5179225 A	20-07-1993
			US 5246974 A	21-09-1993
US 4694030	A	15-09-1987	DE 3602888 A1	06-08-1987
			AT 77096 T	15-06-1992
			CA 1329670 C	17-05-1994
			DE 3779690 D1	16-07-1992
			EP 0243576 A2	04-11-1987
			JP 62184057 A	12-08-1987
US 5262454	A	16-11-1993	DE 4013161 A1	07-11-1991
			AT 118233 T	15-02-1995
			CA 2041102 A1	26-10-1991
			DE 59104525 D1	23-03-1995
			EP 0453912 A2	30-10-1991
			JP 2666004 B2	22-10-1997
			JP 6057140 A	01-03-1994
JP 11158354	A	15-06-1999	NONE	
EP 0995778	A	26-04-2000	US 6239212 B1	29-05-2001
			AU 771476 B2	25-03-2004
			AU 4454099 A	04-05-2000

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 03/05503

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0995778	A	BR 9903776 A CA 2278255 A1 CN 1252424 A EP 0995778 A2 JP 2000129205 A KR 2000028612 A	13-03-2001 23-04-2000 10-05-2000 26-04-2000 09-05-2000 25-05-2000
US 5760155	A 02-06-1998	AU 699410 B2 AU 7114596 A BR 9610684 A CA 2232588 A1 CN 1200742 A CZ 9800899 A3 EP 0852594 A1 HU 9802301 A2 JP 11511506 T NO 981354 A NZ 319016 A PL 325864 A1 WO 9711983 A1	03-12-1998 17-04-1997 06-07-1999 03-04-1997 02-12-1998 12-08-1998 15-07-1998 29-03-1999 05-10-1999 25-05-1998 25-11-1998 17-08-1998 03-04-1997
US 4624998	A 25-11-1986	CA 1263782 A1 DE 3650681 D1 DE 3650681 T2 EP 0230619 A2 JP 1810903 C JP 5012365 B JP 62158716 A	05-12-1989 18-06-1998 03-12-1998 05-08-1987 27-12-1993 17-02-1993 14-07-1987